

Response— Refer to the responses to Comments 1, 2, and 12, above.

Comment 15: Page 9 of 30, 3rd bullet: Please clarify whether or not explosive, propellants, or other COCs potentially in munitions were factored into soil and ground water analytical data used to support closure of the bunkers.

Response— No, the bunkers were used for storage with no reported history of a release or open burn/open detonation activities.

Comment 16: Page 10 of 30, Section 2.1.3; Assessment of Remedy Protectiveness; and Page 11 of 30, Section 2.1.4, Areas of Non-compliance: Although EPA concurs that it is premature to statistically evaluate contaminant trends, our comprehensive evaluation of the site database suggests that several of the plumes do not appear to be “stable” (i.e., at a quasi steady-state), but rather, may be advancing. In this light, the seven piezometer locations where ground water PALs were exceeded should be viewed with some caution. Additional work needs to be directed to the ground water/surface water pathway prior/during ME#3 (please see General Comments 1 and 2, above). To be conservative in the interim, would it be appropriate to issue an advisory stating the location, nature and levels of risk presented by the current data relative to the PAL exceedances?

Response— Refer to the responses to Comments 1, 2, 11, and 12, above.

Comment 17: Page 11 of 30; Section 2.1.7; Recommendations; and Figure 2: Figure 2 should be updated to include locations for MW07-35S and MW07-36S which are mentioned in the text in this section as well as on page 8 of 30, Section 2.1.1.1. Note also that in this section (2nd to last sentence), MW-21 is erroneously referred to as “MW-221.” Please fix this typo. EPA concurs with the Navy’s recommendations listed here. However, in addition, EPA made the several additional recommendations during the meeting of December 12, 2002 which are listed in General Comment 1, above.

Response— Figure 2 has been updated with the locations for MW07-35S and MW07-36S and the typo has been corrected. Also, refer to the response to Comment 1, above.

Comment 18: Page 14 of 30, Section 2.2.1.1; Significant Events: The damage to a significant number of the site monitoring wells described in the preceding paragraph should be placed on the chronology, in addition to the date at which the discovery of the damage was made. Mitigative measures should also be placed on the chronology. It does not appear that sufficient efforts have been made to re-instate the compromised monitoring network. As a result, it is not clear that the conclusions offered for this site are appropriate. See General Comment _____, above.

Response— As stated in the text, all but two of the damaged wells seem to be acceptable for now, and those two wells (MW09-14I and MW09-09D) are recommended for replacement. However, because such well replacement work (and the potential installation of other wells at EPA-recommended locations) would involve penetration of the multimedia cap, it was agreed during the 8 November 2001 BRAC Cleanup Team (BCT) Meeting, that decisions regarding the replacement of damaged wells and/or the installation of additional monitoring wells would be delayed for two years pending the collection and assessment of monitoring data during that time, including probable changes resulting from capping of the landfill.

Comment 19: Page 17 of 30, 2nd bullet: The text states that, “The progression of wetland development is being monitored over time to determine the feasibility of sustainability.” Please indicate what criteria would be used to “determine the feasibility of sustainability.” What types of monitoring will be used to supply information to make this determination?

Response— Visual observation and photo documentation is being accomplished to assess any net loss or gain of the wetland species during semi-annual landfill inspections. The continued presence of wetland species over time would provide qualitative evidence of sustainability.

Comment 20: Page 19 of 20, 1st para.: It is not clear that the range of COCs detected, and their locations, support a determination of “protectiveness.” The data could be viewed with the opposite location, and it is perhaps more appropriate to indicate that the data are not conclusive, and that additional efforts will be undertaken to clarify the situation. For example, it is not encouraging that PCBs were detected above the PAL for both ME 01 and ME 02 at SED09-01, which is located in the general area of the 1999 supplemental PCB removal. EPA’s review of the ME 3 report identified numerous recommendations in this regard, which are summarized in General Comment _____, above.

Response— The following has been included in Section 2.2.6.4 (Data Review) of the Revised Draft Five-Year Review document:

The ME 01 through ME 04 results of the sediment samples indicated inconsistent exceedance of PAL for only a few constituents in a few locations (Table 4):

- *4,4'-DDE (ME 03, SED09-09 at 9.5 micrograms per kilogram (µg/kg) versus 7.65 µg/kg for the PAL)*

- 4,4'-DDT (ME 01, SED09-01 at 62J $\mu\text{g/kg}$ versus 6 $\mu\text{g/kg}$ for the PAL)
- Alpha-chlordane (ME 03, SED09-01 at 21 $\mu\text{g/kg}$ versus 6 $\mu\text{g/kg}$ for the PAL)
- Total PCB (ME 01, ME 02, and ME 04 for SED09-01 at 1,600 $\mu\text{g/kg}$, 220 $\mu\text{g/kg}$, and 910 $\mu\text{g/kg}$, respectively, versus 215 $\mu\text{g/kg}$ for the PAL)
- Several PAH (ME 04, SED09-10 overall 77,260 $\mu\text{g/kg}$ versus the 44,792 $\mu\text{g/kg}$ PAL for total PAH).

The small number of compounds detected and the inconsistent detections of these analytes across the area sampled do not support a protectiveness problem in sediment at this time. Only three pesticides have been detected in sediment at concentrations above their PAL (4,4'-DDE; 4,4'-DDT; and alpha chlordane) once each and during only one ME. In comparison, only trace amounts of one of these pesticides (4,4'-DDT) has been detected in ground-water samples from monitoring wells located upgradient within the landfill (MW09-14D at 0.0075 $\mu\text{g/kg}$ and MW09-20D at 0.071J $\mu\text{g/kg}$) both of which are screened in the deep zone near the base of the silt unit and neither of which is close to the SED09-01 location where 4,4'-DDT was detected once above the PAL. The site data indicate that ground water from the landfill does not appear to be negatively impacting the sediment. However, continued assessment of the P09-01 and P09-10 locations (outside the constructed wetland area) is appropriate to build a database from which statistical analysis could be performed if necessary to determine if there is unacceptable risk to the environment. The presence of PCB at the P09-01 location is not unexpected, because it is in the vicinity of the PCB soil removal action of Spring 1999 and the concentrations detected at P09-01 (220 $\mu\text{g/kg}$ –1,600 $\mu\text{g/kg}$) have been below the removal action goal of 2,000 $\mu\text{g/kg}$. The elevated concentration of PAH detected in the SED09-10 sample from ME 04 is the first PAH exceedance in a sediment sample during the first four monitoring events and suggests the presence of a localized remnant (approximately 2–3 ft bgs) of the historical activity at the site.

Comment 21: Page 21 of 30, para. 2: The truck washing area which drained to the leaching field in Study area 01 was located south of Building 224, and therefore was not included in Study area 1. At the same time, the truck washing area does not seem to have been addressed by the investigation done for Site 02, south of the building. Please clarify.

Response— The sentence has been corrected as follows based on a similar sentence in the SASE (Halliburton NUS, September 1994): “ The leaching field was installed on the site [Study Area 01] to dispose of surface water runoff and storm water from a truck washing area south of the site at Building 224.” In other words, the truck washing area as shown in Figure 2-3 of the SASE was located between Building 224 and Battalion Boulevard, not south of Building 224.

Comment 22: Page 22 of 30: It does appear that the plume emanating from the PR-58 NIKE site has migrated to the east “beneath a portion of Navy parcel 7.” However, it is still unclear whether or not the PR-58 plume is also responsible for at least some of the CVOC contamination identified at Site 16. Please see general comment, above.

Response— Refer to the response to Comment 4, above.

Comment 23: Page 25 of 30; Section 3.1.7: Characterization and/or pilot testing of remedial technologies on the up-gradient PR-58 NIKE site will likely require enhancements/additions to the LTMP for Sites 02 and 03 and Study areas 01 and 04. Please see general comment, above.

Response— Refer to the response to Comment 5, above.

Comment 24: Page 25 of 30; Section 3.2.1; Site Description: It should be noted that it is as yet unclear to what extent the contamination identified beneath Site 16 extends also to the west, i.e., in the upgradient direction. In addition, it is still unclear whether or not the PR-58 plume and/or contamination beneath Sites 02 and 03 and Study areas 01 and 04 may also responsible for at least some of the CVOC contamination identified at Site 16. The upgradient extent and geometry of the plume(s) beneath Site 16 are in need of additional characterization. Please see general comment, above.

Response— Refer to the response to Comments 4 and 6, above.

Comment 25: Page 26 of 30; RIA 86: The fact that no connecting pipes were identified between an outfall pipe at Allen Harbor and floor drains beneath Building E-107 begs the question as to whether or not the floor drains essentially discharged directly to the subsurface. The fact that several of the other floor drains beneath Building E-107 were not investigated further compounds these concerns. Although present information does not suggest an immediate problem, measures should be taken to address this issue, either as part of the ongoing investigation, the LTMP, or both.

Response— The following statement was in the Draft Five-Year Review Report Section 3.2.1 (now Section 3.2.3.4 Initial Responses): “Some subsurface investigation

outside the building continued into the Phase I and II RI.” This sentence has been revised in Section 3.2.3.4 of the Revised Draft document as follows:

“Some subsurface investigation outside the building continued into the Phase I and II RI, including the installation of monitoring well cluster MW16-48S/I/D (Figure 9) from which sampling results will not be available until Spring 2003.”

**RESPONSE TO COMMENTS DATED 15 JANUARY 2003 FROM
RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT ON THE
FIRST FIVE-YEAR REVIEW REPORT OF DECEMBER 2002 FOR
FORMER NAVAL CONSTRUCTION BATTALION CENTER (NCBC) DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND**

Comment 1: Page 3, Section 1.1, Facility Location and Description, Paragraph 1, Last Sentence -- This sentence states that the Navy transferred the Quonset Point Naval Air Station (NAS) to the Rhode Island Port Authority (RIPA). Please revise this sentence to state that NAS was transferred by General Services Administration to RIPA.

Response— The sentence has been revised in Section 1.1.2 of the Revised Draft version of the document as follows:

Adjoining the southern boundary of the Main Center is the decommissioned Naval Air Station (NAS) Quonset Point, which was transferred by the General Services Administration to the Rhode Island Port Authority (RIPA) (currently named the Rhode Island Economic Development Corporation [RIEDC]) and others between 1975 and 1980.

Comment 2: Page 17, Section 2.2.2, Description of Remedial Objectives, Bullet 2 -- Please note that the constructed wetland serves as protection for the revetment by acting as an energy dissipater. From RIDEM's perspective, the constructed wetland simply changed one form of wetland to another.

Response— The referenced bullet has been revised in Section 2.2.4 (Remedial Actions):

Construction of a breakwater structure just east of a majority of the revetment wall, along with construction of a wetland area between the revetment wall and breakwater structure, which together act to trip waves and reduce energy reaching the revetment. Construction of this wetland area along the shoreline of the site also serves as a natural resources/habitat improvement and used material dredged from the entrance channel to Allen Harbor. The progression of wetland development is being monitored over time to determine the feasibility of sustainability. This addressed the RAO for sediment and wetlands.

Comment 3: Page 21, Section 3.1.1, Site Description and Status (Study Area 01) -- This paragraph states that human health risks associated with this site are below EPA thresholds, implying that no further action is required. Please be advised that RIDEM does not accept the Human health Risk Assessment prepared for this site since the criteria utilized to arrive at the risk values do not meet RIDEM

Remediation Regulation criteria. Based on RIDEM Method 1 Criteria there are residential exceedances for benzo(a)pyrene, chrysene, and lead. If remediation is not possible, then an Environmental Land Use Restriction will be required which prevents residential land use. This needs to be included in the text.

Response— The following was added to Section 3.1.3.5 (Basis for Taking Action) of the Revised Draft document:

Also, there were no cancer risks that exceeded EPA's "acceptable risk range" of 10^{-6} to 10^{-4} for potential future residential receptors. However, RIDEM does not accept this HHRA prepared under CERCLA guidance, because it is RIDEM's position that the criteria utilized to arrive at the risk values do not meet RIDEM Remediation Regulation criteria. Further, it is RIDEM's position that if remediation is not possible, then an Environmental Land-Use Restriction will be required that would prevent residential land use.

Comment 4: Page 21, Section 3.1.1, Site Description and Status (IR Site 02) -- The discussion, in this section, fails to mention that lead levels remain which are above RIDEM Remediation Regulation Residential Exposure Criteria. If remediation is not possible, then an Environmental Land Use Restriction will be required which prevents residential land use. This needs to be included in the text.

Response— The following was added to Section 3.1.3.5 (Basis for Taking Action) of the Revised Draft document:

However, RIDEM has stated that there are lead levels in Site 02 soil remaining above RIDEM Remediation Regulation Residential Exposure Criteria, and if remediation is not possible, then an Environmental Land-Use Restriction will be required which prevents residential land use.

Comment 5: Page 24, Section 3.1.6, Statement of Protectiveness, Paragraph 1, Sentence 3 -- For Study Area 04 the Navy notes that risks associated with Aroclor-1260 exceeded 10-5. Please note that the Navy elected to use RIDEM Method 1 Direct Exposure Criteria for this site and on that basis none of the confirmatory PCB samples exceeded the 10 ppm residential exposure criteria.

Response— The following was added to Section 3.1.3.5 (Basis for Taking Action) of the Revised Draft document:

The Navy also met the RIDEM Method 1 Direct Exposure Criteria for this site, and on that basis, none of the confirmatory soil PCB samples exceeded RIDEM's 10 ppm residential exposure criteria.

Comment 6: Page 30, Section 3.2.6, Statement of Protectiveness -- “The results of the Phase I RI do not indicate any imminent threats to human health and the environment.” Please remove this sentence as we have not yet completed the studies and this seems to imply that we are unlikely to find threats in the future. While it is true that the groundwater is not currently being used there are no restrictions on its use other than those self imposed. The groundwater has been shown to exceed MCLs and RIDEM GA groundwater standards which in and of itself demonstrates that it is not safe for human consumption.

Response— Because there has been risk assessment (Phase I RI) of the available sample results, it is appropriate to state the findings so far. Therefore, the referenced sentence now in Section 3.2.10 (Protectiveness Statement) of the Revised Draft document has been revised for clarity as follows:

The results of the Phase I RI do not indicate immediate unacceptable risk exposure to human health or the environment from the Navy’s historical use of the site. Therefore, EPA believes that there is no current exposure to the known contamination. Further investigations are planned to determine the nature and extent of the contamination, and to further assess risk to human health and/or the environment from past Navy activity at the site.

Comment 7: Figures -- Please provide Figures 1 through 5. They were not included in the submission.

Response— A full set of the figures (1 through 10) in the Draft version of the document was overnight shipped to Mr. Gottlieb on 23 January 2003.

Comment 8: Appendix A -- For IR Sites 05, 06, 08, 10, 11, 12, 13, and 14 as well as Study Area 15 please include a statement for each site in the Summary of Risk Assessment section that states that RIDEM Remediation Regulation Method 1 criteria was met. This is necessary to document that RIDEM concurred with the no further action record of decision for each of these sites.

Response— The following was added to the “Summary of Risk Assessment” sections of Appendix A: “RIDEM Remediation Regulation Method 1 criteria was met.” The following was added to the “Remedy Selected” sections of Appendix A: “RIDEM concurred with the NFA decision for this site.”

**RESPONSE TO COMMENTS DATED 11 MARCH 2003 FROM THE
U.S. ENVIRONMENTAL PROTECTION AGENCY
ON THE REVISED DRAFT FIRST FIVE-YEAR REVIEW REPORT
OF FEBRUARY 2003 FOR
FORMER NAVAL CONSTRUCTION BATTALION CENTER (NCBC) DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND**

Comment 1: P. ES-1, ¶ 1, last sentence and p.2 of 61 second to last paragraph; please re-write to state: "The trigger for this first five-year review of the former NCBC Davisville facility is the initiation of the first remedy that left waste in place at concentrations above unrestricted use levels, (i.e., the remedy for Site 09[Allen Harbor Landfill]), and specifically the remedy initiation letter from the Navy dated 30 March 1998." It is to be expected that since the actual due date is on Sunday that the date of this five year review will either be the 28th or the 31st. Please do not change the EPA required due date from the 30th in this document.

Response— The two referenced sentences have been revised as follows: "The trigger for this first five-year review of the former NCBC Davisville facility is the initiation of the first remedy that left waste in place at concentrations above unrestricted use levels, (i.e., the remedy for Site 09[Allen Harbor Landfill]), and specifically the remedy initiation letter from the Navy dated 30 March 1998".

Comment 2: P. ES-1, ¶2, please include "shellfish" in the monitoring requirements.

Response— Shellfish has been added as follows: "...of ground water, sediment, shellfish, and landfill gas..."

Comment 3: P. ES-1, ¶ 2, third to last sentence, please re-write the issue to be ..."the quality of ground water discharging from the site to the nearshore."

Response— The sentence has been re-written as follows: "The outstanding issue is the inconclusiveness of the available shoreline piezometer sample data to confirm the quality of ground water discharging from the site to the nearshore."

Comment 4: P. ES-1, ¶ 2, last sentence and other appropriate sections for both OU1 and OU8; Suggest adding additional sentence which states, "In addition, the Navy is considering conducting additional studies, tracer tests, more detailed measurement and mapping of ground water head distribution, and/or other evaluations in the shoreline environment in order to better identify areas where plume discharge has the potential to occur, and to optimize long-term monitoring locations accordingly."

Response— As agreed during the 19 March 2003 BCT Meeting, the referenced sentences were revised as follows: "In addition, the Navy is considering conducting additional studies and/or other evaluations in the shoreline environment in order to better

identify areas where plume discharge has the potential to occur, and to optimize long-term monitoring locations accordingly.”

Comment 5: P. ES-1, ¶ 3, second sentence, typo- should monitoring be monitored?

Response— The word ‘monitoring’ has been changed to ‘monitored.’

Comment 6: P. ES-1&2, and elsewhere where appropriate, please change the protectiveness statements for all OUs to defer the decision as discussed during telephone conferences the week of March 3, 2003.

Response— The Site 07 protectiveness statement has been revised to:

A protectiveness determination of the remedy at Site 07 cannot be made at this time until further information is obtained. Site 07 LTM plan states that 8 rounds of sampling will be completed prior to determining the protectiveness of the remedy. As of this date, 3 rounds of sampling have been completed. It is estimated that the 8 rounds of sampling will be completed by November 2006, at which time a protectiveness statement will be made. Based on the reviewed data, the Site 07 remedy is expected to be protective of human health and the environment as long as the institutional controls remain in place as implemented through the LUCIP, and in the interim, the exposure pathways that could result in unacceptable risk are being monitored, including consideration of conducting additional studies and/or other evaluations in the shoreline environment in order to better identify areas where plume discharge has the potential to occur, and to optimize long-term monitoring locations accordingly.

The Site 09 protectiveness statement has been changed to:

A protectiveness determination of the remedy at Site 09 cannot be made at this time until further information is obtained. Site 09 LTM plan states that 8 rounds of sampling will be completed prior to determining the protectiveness of the cap. As of this date 3 rounds of sampling have been completed. It is estimated that the 8 rounds of sampling will be completed by May 2004, at which time a protectiveness statement will be made. The remedy is expected to be protective of human health and the environment as long as the cap and institutional controls remain in place. Remedy of the site has been addressed through stabilization and capping of the waste and contaminated soil, gas vents, covering of most of the shoreline sediment with the constructed wetland, the installation of fencing and warning signs, and the implementation of institutional controls through the LUCIP to prevent exposure to, or ingestion of, contaminated ground water and to prevent ground surface activities (e.g., building, motorized vehicles except for LTM activities, digging) that could negatively impact

the integrity of the landfill cap. The outstanding issue is the inconclusiveness of the available shoreline piezometer sample data to confirm the quality of ground water discharging from the site to the nearshore. Additional piezometers will be installed at each of the 10 locations to attempt to obtain all planned sample aliquots for analysis starting with ME 05 or ME 06. The results of the future complete analyses are hoped to aid in the determination of the representativeness of this sampled area. In addition, the Navy is considering conducting additional studies and/or other evaluations in the shoreline environment in order to better identify areas where plume discharge has the potential to occur, and to optimize long-term monitoring locations accordingly.

The Study Areas 01 and 04, and Sites 02 and 03 protectiveness statement is as follows: A protectiveness determination of the remedy at these sites can not be made at this time until further information is obtained. The remedy is expected to be implemented in 2007, at which time a protectiveness determination will be made.

The Site 16 protectiveness statement is as follows: A protectiveness determination of the remedy at this site can not be made at this time until further information is obtained. The remedy is expected to be implemented in 2006, at which time a protectiveness determination will be made.

Comment 7: Figure of EPA's 5-yr summary form, last (comment) section on p.1 or other appropriate space in the front of this document, please add the following table:

EPA designation -	
OU1- Navy designation	Site09
OU2	Site 12
OU3	Sites 5, 8 (soils only)
OU4	Sites 6, 11 & 13
OU5	Sites 0 & 8(groundwater only)
OU6	Site 14
OU7	Study Areas 1 & 4, Sites 2 & 3
OU8	Site 7
OU9	Site 16

Response— The requested information has been added to the bottom of Page 1 of the form as agreed during the 19 March 2003 BCT Meeting:

Navy designation	EPA designation
Site 09	OU1
Site 12	OU2
Sites 05 and 08 (soils only)	OU3
Sites 06, 11, and 13	OU4
Sites 10 and 08 (ground water only)	OU5
Site 14	OU6
Study Areas 01 and 04, and Sites 02 and 03	OU7
Site 07	OU8
Site 16	OU9

Comment 8: Figure of EPA's 5-yr summary form p. 1, please change the review period to December 20, 2002 to March 31, 2003. The review period is defined in the EPA data base as the time it takes to write up the report, not the time the report covers, as the start date is an EPA fiscal trigger. Keeping the other review periods noted in the text to be the 03 to 08 time frame is fine and shouldn't be too confusing since the text is Navy lead and this form is EPA lead.

Response— EPA's Review Period has been changed to "12/20/03 to 03/30/03." It is assumed that this review period would end 30 March 2003 as referenced previously in Comment 1.

Comment 9: Figure of EPA's 5-yr summary form p. 2; *Recommendations and Follow-up Actions* for Site 07, and other appropriate sections: The Navy should also consider adding another line item which indicates, "Consider additional technical issues identified through regulatory reviews of ongoing monitoring data (e.g., EPA comments presented at BCT meeting of December 12, 2002)."

Response— Comment noted, but the Navy disagrees with the addition of the referenced sentence as discussed during the 19 March 2003 BCT Meeting. No related change will be made to the text.

Comment 10: Figure of EPA's 5-yr summary form p. 3; *Recommendations and Follow-up Actions* for Study Areas 01 and 04, and Site 02 and 03: EPA notes that the IGWSP currently in place for these sites may need to be modified depending on the scope and scale of work proposed for the adjoining/up-gradient NIKE site. Changes with respect to monitoring frequency, location, or both may be needed. Since specific plans for future work on the NIKE parcel are not known, an acknowledgment of flexibility in this regard would be useful during the development of the FS.

Response— Comment noted.

Comment 11: P. 9 of 61, end of page, please include language that indicates these restrictions will run with the land, such as the language on p.25 in the paragraph just above section 2.2.3.3.

Response— The following has been added as the first bullet: “These environmental land-use restrictions apply to the use of the contaminated site by the Grantee, its successors, and assigns, as delineated on Figure 3 (land-use restriction boundary).”

Comment 12: P.10 of 61, end of section 2.1.3.2 and p.43 end of section 3.1.3.2, please include the following at the end of the paragraph that indicates why the LUCIP inspections are done, “...no variance from the environmental land-use restrictions stated above and there has been no interference with the implemented remedy (i.e.; monitoring system).”

Response— The following was added to the end of the referenced sentence in Section 2.1.3.2: “and that there has been no interference with the implemented remedy (i.e.; monitoring system).” The following was added to the end of the referenced sentence in Section 3.1.3.2: “to document that there has been no variance from the environmental land-use restrictions stated above and there has been no interference with the monitoring system.”

Comment 13: Sec. 2.1.4.1 (p14) - Please indicate when the ELUR was recorded in the Town land records. Marilyn Cohen has indicated that the date the deed was recorded was October 17, 2001.

Response— The ELUR has not yet been recorded.

Comment 14: P. 15 of 61, para. 4., last sentence; It would be useful to add the following sentences here: “The Navy will continue to evaluate new data from the shoreline piezometers following each monitoring event with respect to the risk range.”

Response— The referenced sentence had been added as requested.

Comment 15: P.16, Question A, please re-write the first sentence to read as is stated on p.19 first sentence under the Technical Assessment Summary section. The double negative on p16 is confusing.

Response— The referenced sentence has been revised as follows: “Based on the data reviewed and site inspections, the remedy is functioning as intended by the ROD.”

Comment 16: P. 19, Question C for OU8 and other appropriate areas for OU1; Although EPA does not disagree with the Navy’s statement here, a suggestion is offered for the next 5-yr review. It may be useful to conduct an actual topographical survey of the shoreline areas, in conjunction with each 5-year review, with respect to known, fixed features so that it may be determined that the shoreline areas, wetland boundaries, etc. have not shifted significantly due to shoreline erosion or other slow yet inexorable processes. An historical evaluation of the Site O7 property (USGS, 1999) revealed that substantial changes to the shoreline area are probable over timeframes of several years, which may hold serious consequences

to the viability of fixed piezometer locations, for instance. An accurate shoreline survey would be a quick means of evaluating this possibility. There would also be a similar need beyond the breakwater along the revetment on both the north and south ends of the landfill.

Response— Comment noted. There will be no related change to the text. However, in the future, potential significant changes in the position of the site shoreline along the harbor and the entrance channel would be documented by the need to relocate specific piezometers for low-tide stage sampling during monitoring events (previous and potential new piezometer locations [coordinates] are documented by Global Position System [GPS] equipment, and thus, would show significant variation in the position of related shoreline). The Navy would procure new geo-referenced aerial photographs (as they are available) to plot the locations of the piezometers and monitoring wells.

Comment 17: P. 20, the text at the top of the page and the text at the end of paragraph 2, seems to be misplaced. The sentence on the bottom of p. 19 does not flow into the next page. On page 20 the text seems to be discussing OU1 instead of OU8. Perhaps the text from the last sentence on p.19 through the second paragraph on p. 20 should have been erased during proofing? Please clarify.

Response— The referenced sentences related to Site 09 were inadvertently included and have been deleted.

Comment 18: Sec. 2.2.3.2 (p. 24) - Second sentence - is the land transfer still ongoing or has it been completed? In the third sentence after "in the future" insert "due to environmental land use restrictions required by the remedy and."

Response— The referenced clause has been added as requested.

Comment 19: Sec. 2.2.4.1 (p30) - Has the ELUR been recorded in the Town land records yet? If so, include the date of the recording in this section. If it hasn't, it should be identified in the Issues and Recommendations and Follow-up Actions Tables at 2.2.8 and 2.2.9. Implementation of the ICs portion of the remedy does not actually occur until the ICs have been recorded.

Response— Neither the deed nor the ELUR has been recorded. The following has been added to Section 2.2.8: "Deed has not yet been recorded." The following has been added to Section 2.2.9: "Work with the Town and National Park Service to expedite property transfer and recording of the deed and ELUR."

Comment 20: P. 31; para. 4; 3rd to last sentence and other appropriate sections; The text should mention the numerous monitoring wells which have been perhaps more than superficially damaged, which may be in need of substantive repairs and/or replacement. The text should list wells in this category in conjunction with a time-frame for corrective action.

Response— The following sentence has been added to the referenced paragraph:

...repairs that were completed during October 2002. Additionally, two monitoring wells (MW09-14I and MW09-09D) need to be evaluated regarding potential abandonment and replacement (refer to the last paragraph of Section 2.2.3.1 for related detail). No conditions have been observed...

Also, the following bullet was added:

- *Assess whether or not to replace damaged monitoring wells and/or consider adding wells to the monitoring network (after evaluation of the ME 08 sample results by 31 December 2004).*

Comment 21: P. 33, 2nd para.; It would appear that the current piezometer network will not be able to provide a sufficient data set so as to allow a statistical evaluation of contaminant trends. The tentative conclusion that much of the piezometer network monitors “harbor water” rather than ground water discharge argues strongly that corrective measures and/or a revised approach are needed in the near-term as has been verbally proposed. Please include the Navy’s proposal in the text in this and other appropriate sections.

Response— The following sentence has been added: “...discharge to this area. The Navy plans to add additional piezometers to each of these 10 locations. Additionally, although...”

Comment 22: Page 33 of 61, first partial sentence: Typo? Change Table 24 to Table 4.

Response— This inadvertent typo has been corrected to Table 1.

Comment 23: Page 33 of 61, end of second paragraph: It is stated that the dissolved metals were higher in the piezometers than just upgradient in the landfill, and that this was additional evidence of recycled harbor water from the previous high stage. The latter statement should be eliminated or supported by harbor dissolved metals data. It could just as easily be that the seawater is dissolving metals from the soil matrix. This type of evaluation should be done in the upcoming data evaluation report.

Response— The Navy will consider the collection of a sample of the harbor water for analysis of the same metals as the piezometer water samples are analyzed. So far, the available piezometer water sample results do not support that these metals are being dissolved from the stainless steel piezometers; i.e., the concentrations have not consistently increased with time.

The related sentence has been revised as follows: “~~This further supports~~ The possibility that much of the water collected from the piezometers may be recycled

harbor water from the previous high tide stage will be assessed after collection of 8 monitoring events of data.”

Comment 24: Page 34 of 61, first sentence: This sentence states that the small number of compounds detected and inconsistent detections do not support a protectiveness problem. This paragraph goes on to describe the exceedances of a few PALs; however, the numerous exceedances by PAHs in ME#4 (Table 4) are not mentioned. The data could be interpreted that the concentrations in sediment currently exceed PALs, but additional data are needed to determine whether there is a protectiveness problem. The PAH exceedances should be included here in the text. In addition, there does appear to be some level of consistency in sediment sample detection. For example, COC exceedances were recorded the SED09-01 location at each of the 4 monitoring events.

Response— Each of the issues noted by the commenter have been previously stated in the text of the Revised Draft document. Also, PAH had been previously defined in the text as ‘polycyclic aromatic hydrocarbons.’ As agreed during the 19 March 2003, the following revision was made (additions are underlined): “...detected at P09-01 (220 µg/kg–1,600 µg/kg) except for one sample have been below the removal action goal of 1,000 µg/kg. The elevated concentration of 8 PAH detected in the SED09-10 sample from ME 04...”

Comment 25: Page 34 of 61, 4th sentence: This sentence states that the site data indicate that ground water from the landfill does not appear to be negatively impacting the sediment. The basis for this statement should be described, presumably by comparing the presence/concentrations of sediment contaminants with groundwater contaminants, as soon as the data is available to show that the sediment sampling locations are directly downgradient (within the flowplath) of the groundwater sampling locations. This statement should be removed from this and other appropriate sections.

Response— The referenced sentence will remain as is because it is based on the available site samples results and is qualified with the words ‘does not appear to be.’ However, the following sentence has been revised with additional words (underlined) as agreed during the 19 March 2003 BCT Meeting: “However, continued assessment of the P09-01 and P09-10 locations (outside the constructed wetland area) and ground-water flowpaths are appropriate to build a database from which statistical analysis could be performed if necessary to determine if there is unacceptable risk to the environment.”

Comment 26: P. 34 and 35, the ESD required a 1 ppm cleanup level in the sediments, please change the 3 places where it states 2 ppm to 1 ppm. The result of this change is that the conclusion must also change. Perhaps a statement such as, “slightly above the cleanup level” would be appropriate?

Response— The referenced sentence has been revised as follows: "...detected at P09-01 (220 µg/kg–1,600 µg/kg) except for one sample have been below the removal action goal of 1,000 µg/kg."

Comment 27: Sec. 2.2.7 (p 35) and Secs. 2.2.8 & 2.2.9 - If the property has not yet been transferred the ELUR not recorded the answer to this question should state how the Navy is maintaining the use restrictions at the property (in addition to maintaining security) until the property transfer can be completed and the ELUR recorded. This should also be identified in the Issues and Recommendations and Follow-up Actions Tables.

Response— The Town of North Kingstown has not yet received the deed; therefore, neither the deed nor the ELUR have been recorded. The following has been added to Section 2.2.8: "Deed has not yet been recorded." The following has been added to Section 2.2.9: "Work with the Town and National Park Service to expedite property transfer and recording of the deed and ELUR."

Comment 28: P. 44, the last paragraph seems to be a more appropriate wording than the one preceding it.

Response— The first paragraph related to Site 03 in Section 3.1.3.4 has been deleted.

Comment 29: P. 46, 2nd paragraph, 6th sentence, if the Navy also found acceptable risk under a residential risk assessment, the last part of the sentence can be stricken. Remove "...under the planned future use of the site" since an industrial future use is envisioned under the MARAD transfer and this sentence as written doesn't indicate unrestricted use.

Response— The referenced sentence was changed as requested: "The result was that there are no concerns for adverse effects from lead in soil at Site 02 ~~under the planned future use of the site~~."

Comment 30: P. 47 & 61, the owner of the property is the Navy. RIEDC is the lessee. Please change the sentence to read that the "lessee is aware of the contamination".

Response— The related sentences in Sections 3.1.6.4 and 3.2.10 have been revised as follows: "The leasee is aware..."

Comment 31: P.61, § 3.2.10, 7th sentence, change "EPA" to "Navy" since the Navy is the author of the document.

Response— As agreed during the 19 March 2003 BCT Meeting, the referenced sentence was revised as follows: "Therefore, ~~EPA believes that~~ there is no current exposure to the known contamination."

Comment 32: Appendix, Table D-1, p.2 for Site 7, please re-evaluate the Rivers and Harbors Act for NCBC Davisville rather than for Newport. The Allen Harbor is a public marina and is not use or access restricted.

Response— The reference to Newport was an inadvertent error and has been deleted.

Comment 33: Table D-1 for Site 07, page 3 - Under federal endangered species act remove citation to least tern (state-listed not federally listed but add citation for several federally listed sea turtles that are found in Narragansett Bay - The federally endangered loggerhead turtle (*Caretta caretta*) and federally threatened Kemp's ridley turtle (*Lepidochelys kempii*) occur in the waters of Narragansett Bay. Appropriate agencies will be consulted to find ways to minimize adverse effects to the listed species from the removal and restoration remedy. Also remove citation to the Florida grasshopper sparrow since the federally-listed subspecies does not occur in the Northeast.

Response— The sea turtles have been added and the Florida grasshopper sparrow has been deleted.

Comment 34: Table D-1 for Site 07, page 4 - Under the state endangered species act add the citation about for the two state-listed sea turtles.

Response— The sea turtles have been added.

Comment 35: Table D-1 for Site 09 for state water quality regulations - need to identify specifically how the criteria were amended and how the changes were incorporated into the remedy.

Response— This comment was resolved during the 19 March 2003 BCT Meeting and requires no change to the table. As previously stated in the Table D-1, the last revision of the regulation was 8 November 2000, prior to finalization of the LTM QAPP dated November 2001. Therefore, the values used did not change after finalization of the QAPP and no change is required.

Comment 36: Table D-2 for Site 09, page 2 - Under federal endangered species act remove citation to least tern (state-listed not federally listed but add citation for several federally listed sea turtles that are found in Narragansett Bay - The federally endangered loggerhead turtle (*Caretta caretta*) and federally threatened Kemp's ridley turtle (*Lepidochelys kempii*) occur in the waters of Narragansett Bay. Appropriate agencies will be consulted to find ways to minimize adverse effects to the listed species from the removal and restoration remedy. Also remove citation to the Florida grasshopper sparrow since the federally-listed subspecies does not occur in the Northeast.

Response— The sea turtles have been added and the Florida grasshopper sparrow has been deleted.

Comment 37: Table D-2 for Site 09, page 2 - Under the state endangered species act add the citation about for the two state-listed sea turtles.

Response— The sea turtles have been added.

Comment 38: Table D-3 for Site 09, page 2 - The status of TSCA as an ARAR is applicable and the EPA Guidance document is To be Considered.

Response— The status of TSCA as an ARAR has been corrected to “Applicable” and the status of the EPA Guidance document has been shown as “To Be Considered.”

Comment 39: Table H-9.1 and H-9.2 should have a footnote indicating that the risks of individual chemicals are those for trigger chemical concentrations in Table H-3.

Response— The following note has been added to Tables H-9.1 and H-9.2: “Chemicals listed are those with trigger concentrations previously listed in Table H-3.”

Comment 40: Table H-3 should have a footnote indicating that the EPCs represent risk-based trigger levels (rather than average concentrations in surface water at site 07).

Response— The column heading “EPC” has been replaced with “Risk-Based Trigger Value.”

Comment 41: Add Section

3.3 West Davisville Aircraft Counterweight Discovery and Identification

Include the history of the finding and the plan for additional investigation as written on p.3 of the 49th and 50th RAB meeting notes, as appropriate. (I do not have BCT notes for BCT meetings between Feb 2002 and Dec. 2002.) These meeting notes should be forwarded as soon as possible and may contain information that should be included in the 5-year review. Please include in new section 3.3, a description of the final disposition of the counterweights that were found (copy of chain of custody forms/ultimate disposal information). Also to be included is a description of the EBS program and the results of the NRC license review for Davisville-NCBC. This new section 3.3 should be organized as the sections 3.1-CED area and 3.2-site 16 were, such as:

3.3.1 Introduction, Refer to Section 1.1 for description of the purpose do the five-year review.

3.3.2 Site Chronology

Prior to the end of WWII- Quonset Hut Manufacturing

1970's through 1990- Navy Tenant - Defense Reutilization and Marketing Office,
Defense Logistics Agency

EBS Program- Review item 31- DRMO Scrapyard evaluation of data in 1997-1998 with NFA in 1998 {provide information from the appropriate EBS phase II document}

April 1999 sold to RIEDC without environmental restrictions

May 2002 counterweight discovery, removal, disposal

August 2002 Investigation Work Plan Submitted

November/December (?) 2002 clearing and grubbing of site in preparation for Spring 2003 investigation field work

3.3.3 Background

3.3.3.1 Physical Characteristics (appropriate information from EBS program documentation)

3.3.3.2 Land and Resource Use (appropriate information from EBS program documentation)

3.3.3.3 History of Contamination - May 2, 2002, the Navy received a telephone call from the RIEDC about an object discovered by Narragansett Electric during a power pole installation. The object was labeled as "Uranium-high salvage value". The electric... {include text from RAB minutes as appropriate}

3.3.3.4 Initial Response {include text from RAB minutes and include disposal information}

3.3.3.5 Basis for Taking Action, Uranium is a hazardous substance as defined under CERCLA §101 (14) which refers to any hazardous pollutant listed in §112 of the Clean Air Act, 42 USC 7412. Therefore, on May 8, 2002, EPA requested the Navy investigate the nature and extent of contamination in both the soils and groundwater. The Navy will be performing investigative field work in the spring of 2003.

3.3.4 Remedial Actions {use std language in the text of the revised 5 year review document for site 16 for this and sections 3.3.5 & 3.3.6.1,2&3}

3.3.6.4 Data Review no data has been gathered at this site as of this 5-year review.

3.3.6.5 Site Inspections no inspections have occurred since this site is still under investigation

3.3.6.6, 7, 8 {use std language in text for site 16}

3.3.9 Recommendations and Follow-up Actions, Complete the investigation and make decision whether to create another study area under the IRP in accordance with FFA §31.2.

3.3.10 Protectiveness Statement A protectiveness determination cannot be made at this time until further information is obtained. Further information will be obtained by completing the investigative field work in Spring 2003. A protectiveness determination will be made once the investigation is completed.

3.3.11 Next Review {include the std language from site 16.}

Response— The Navy has added the West Davisville Aircraft Counterweight Discovery and Identification Area as Chapter 4 formatted using the same section titles as used in Chapter 3. For content, please refer to the new Chapter 4 in the Final version of the document.

**RESPONSE TO COMMENTS DATED 25 MARCH 2003 FROM THE
U.S. ENVIRONMENTAL PROTECTION AGENCY
ON THE REVISED DRAFT FIRST FIVE-YEAR REVIEW REPORT
OF FEBRUARY 2003 FOR
FORMER NAVAL CONSTRUCTION BATTALION CENTER (NCBC) DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND**

Comment 1: Regarding the Action-specific Table text for TSCA change D-3, p2 for Site 9 to - "Applicable standards for the PCB removal under the ESD and for any PCB remaining on site above cleanup standards."

Response— The requested revision has been made to page 2 of Table D-3.

Comment 2: D-3 p3 Site 9: Regarding the state water quality regs be specific how changes to classifications and criteria have specifically effected the remedy. Change the mod/impact to read, no further discharges are planned, no impact to remedy.

Response— This comment was discussed with EPA on 26 March 2003 and the agreed upon revised statement has been added to page 3 of Table D-3 as follows: "The ongoing storm water discharges are in compliance with the regulation. There is no impact to the remedy."

Comment 3: D-3 p3 Site 9: Regarding the state water pollution control reg listing: Remove the text discussing permits and application procedures. Change the mod/impact to read--no further discharges are planned, no impact to remedy.

Response— This comment was discussed with EPA on 26 March 2003 and the agreed upon revised statement has been added to page 3 of Table D-3 as follows: "The ongoing storm water discharges are in compliance with the regulation. There is no impact to the remedy."

**RESPONSE TO COMMENTS DATED 26 MARCH 2003 FROM THE
U.S. ENVIRONMENTAL PROTECTION AGENCY
ON THE REVISED DRAFT FIRST FIVE-YEAR REVIEW REPORT
OF FEBRUARY 2003 FOR
FORMER NAVAL CONSTRUCTION BATTALION CENTER (NCBC) DAVISVILLE
NORTH KINGSTOWN, RHODE ISLAND**

Comment 1: 2.1.4.1 Remedy Implementation: During August 2001, the LTMP was initiated with ME 01. LUCIP inspections were initiated on 23 May 2001. The deed, without (strikethrough: with) the (strikethrough: environmental restrictions) ELUR, was recorded on 17 October 2001. Since the issues table notes that the ELUR has not yet been recorded, the text should correspond. The way it is currently worded is a bit confusing.

Response— Based on discussion with EPA, Section 2.1.4.1 has been revised as follows: "During August 2001, the LTMP was initiated with ME 01. LUCIP inspections were initiated on 23 May 2001. The deed, without the ELUR, was recorded on 17 October 2001."

Comment 2: 2.1.8 Issues: In the table under "The ELUR has not yet been recorded" mark the last column (Effect Future Protectiveness, since without the ELUR there is a question as to the adherence to the ROD requirements) "Y" rather than "N."

Response— The "N" has been changed to a "Y" for the "Affects Future Protectiveness".

Comment 3: 2.1.9 Recommendations and Follow-Up Actions: Same comment as #2 for "Recording of ELUR" - mark the last column "Y" rather than "N." (Effect Future Protectiveness)

Response— The "N" has been changed to a "Y" for the "Affects Future Protectiveness".

Comment 4: 2.2.8 Issues - Same change as comment 2.

Response— The "N" has been changed to a "Y" for the "Affects Future Protectiveness".

Comment 5: 2.2.9 Recommendations and Follow-Up Actions - Same change as comment 3.

Response— The "N" has been changed to a "Y" for the "Affects Future Protectiveness".

Comment 6: 3.2.10 - in the second sentence, a space may be needed: "A protectiveness determination (strikethrough: of the)of the remedy..." there were also several other areas where edits for spacing may be needed.

Response— The file reviewed by the commenter was set to 'track changes' with redlining and strike-out. If after accepting the changes, spaces are needed, the editor will make the necessary corrections for the final document.

Comment 7: 4.1.3.3 - Its unclear from this text that the area meets residential standards since it implies it was only screened to industrial standards. If so, assuming residential risk is from CERCLA contaminants and not TPH, a CERCLA response action would be required (limited action - IC's).

The results of the limited removal action by Foster Wheeler need to be expanded upon. Were there any sample results that were above residential criteria? Please call to discuss.

Response— After review of the related Foster Wheeler report and discussion with EPA, the following revision of Section 4.1.3.3 was agreed to: The subject area is located within a portion of the DRMO Scrapyard (EBS Review Item No. 31) and was formerly used by the Defense Reutilization and Marketing Office (DRMO), which received material from the Department of Defense for reuse. Scrap items including old refrigerators, metal cabinets, air conditioners, and car parts were stored through 1992. In addition, this area received hazardous materials/hazardous waste until the mid-1980s. According to NCBC Davisville personnel, there are no known releases associated with this subparcel. Therefore, sampling and analysis of surface and subsurface soil and the advancement of three soil borings were conducted as part of the Phase II EBS investigation of NCBC Davisville (EA 1998d). The analytical program included TCL SVOC, pesticides, PCB, TPH, and TAL metals (subsurface soil samples were also analyzed for TCL VOC). The detected concentrations in surface and subsurface soil samples were below screening criteria, except for three locations where the combined TPH values exceeded 300 mg/kg, a RIDEM criteria. Therefore, additional sampling of surface soil was performed under the Phase II EBS follow-On Investigation (EA 1998e). The samples were analyzed for TPH, TCL VOC, and TCL SVOC. VOC were not detected. TPH exceeded RIDEM's Class GA Leachability criterion (500 mg/kg) in samples EBS31-RSS-11 and -13. SVOC exceeded RIDEM's criteria only in one sample (EBS31-RSS-06). SVOC concentrations in the other samples were generally low or not detected. Reinspection of the area did not show evidence of stained soil. It was assumed that the presence of deteriorated pavement accounted for the low concentrations of TPH and SVOC detected in the soil samples. Even so, it was recommended that limited soil removal be conducted at those three sample locations (EBS-31-RSS-06, EBS-31-RSS-11, and EBS-31-RSS-13). The limited soil removal action and confirmatory sampling was completed by FWENC (FWENC 1998b). Based on the low results, EBS Review Item No. 31 was recommended for NFA and concurrence was received from EPA and RIDEM in January 1998.